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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,047	10/13/2005	Stephan Hueffer	264731US0PCT	6812

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EXAMINER	
KHAN, AMINA S	

ART UNIT	PAPER NUMBER
1796	

NOTIFICATION DATE	DELIVERY MODE
10/18/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/524,047	HUEFFER ET AL.	
	Examiner	Art Unit	
	Amina Khan	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *9/25/2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *14-17,21,22,24,26,28,30,32,34,36 and 38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *14-17,21,22,24,26,28,30,32,34,36 and 38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 25, 2007 has been entered.

2. Claims 14-17,21,22,24,26,28,30,32,34,36 and 38 are pending. Claims 1-13,18-20,23,25,27,29,31,33,35 and 37 have been cancelled. Claims 24 and 32 have been amended.

3. The rejection of claims 14,16,21 and 24 under 35 U.S.C. 103(a) as being unpatentable over Plapper et al. (US 4,272,242) is withdrawn.

4. The rejection of claims 14-17,21,22,24,26,28,30,32 under 35 U.S.C. 103(a) as being unpatentable over Komforth et al. (US 6,033,590) in view of Plapper et al. (US 4,272,242) is withdrawn.

5. Claims 32, 34 and 36 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Komforth et al. (US 6,033,590) in view of Cramer et al. (US 2002/0192366) for the reasons set forth in the previous office action.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 14-17,21,22,24,26,28,30,32 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Komforth et al. (US 6,033,590) in view of Zorn et al. (US 3,053,697).

Komforth teaches retanning leather with glutaraldehydes (column 3, lines 25-30), vegetable tanning agents (column 3, lines 40-45), chromium tanning agents (column 3, lines 30-35), kaolins, polysaccharides, dyes, pigments, polyurethanes and nitrocellulose (column 4, lines 1-7,20-40 and 45-67).

Komforth is silent as to the particle size of the kaolins.

Zorn et al. teach that it is conventional to treat chrome, vegetable or organic synthetic tanned leathers with kaolin particles 0.1-50 μm (column 2, lines 4-30) for the benefit of effectively embedding the clay within the leather (column 1, lines 20-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the retanning methods taught by Komforth by incorporating the kaolinites of the particles sizes claimed by Zorn because Zorn clearly teaches that this particle range is conventional and beneficial in treating chrome tanned leathers and is easily embedded within the leather. One of ordinary skill in the art would have been motivated to substitute the particles of Zorn et al. which are of a conventional size for treating chrome tanned leather into the methods of Komforth et al. for the predictable result of effectively treating chrome tanned leathers.

Regarding the limitation of bimodal distribution, it would be obvious to one of ordinary skill in the art to sift the kaolinites such that a bimodal distribution is achieved because Zorn teaches the claimed particle diameters and sifting the resulting clay would obviously provide particles with a diameter less than 0.5μm and particles less than 5μm.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch,* 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). In addition, a *prima facie*

case of obviousness exists because the claimed ranges "overlap or lie inside ranges disclosed by the prior art", see *In re Wertheim,* 541 F.2d 257, 191 USPQ 90 (CCPA 1976; *In re Woodruff,* 919 F.2d 1575, 16USPQ2d 1934 (Fed. Cir. 1990). See MPEP 2131.03 and MPEP 2144.05I.

8. Claims 14,16,21,24,30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Plapper et al. (US 4,272,242) in view of Cramer et al. (US 2002/0192366).

Plapper teaches tanning leathers with a combination of aluminosilicates and bentonites (column 4, lines 10-30; column 18, lines 25-35). Plapper further teaches that tanning can be accomplished by combining aluminosilicate compositions with tanning agents with vegetable-synthetic tanning materials or chrome tanning materials (column 12, lines 5-15; column 24, example 6). Plapper further teaches that the desired particle size can be adjusted by grinding and air sifting (column 9, lines 15-20).

Plapper does not teach all the instantly claimed components in a single example and is silent as to a bimodal distribution and the particle size of the bentonite.

Cramer teaches the conventional use of bentonites in leather treatment compositions (paragraph 0043). Cramer further teaches the particle sizes are 2 nm to 750 nm (paragraph 0041). Cramer further teaches these compositions provide leather with reduced damage to abrasion (paragraph 0040).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tanning methods taught by Plapper by incorporating

the bentonites of the particles sizes claimed by Cramer because Cramer clearly teaches abrasion resistance bentonites provide to leather in these particle sizes. One of ordinary skill in the art would have been motivated to combine the teachings of the references absent unexpected results.

Regarding the limitation of bimodal distribution, it would be obvious to one of ordinary skill in the art to sift the bentonites such that a bimodal distribution is achieved because Cramer teaches the claimed particle diameters and that the desired particle size can be adjusted by grinding and air sifting. Sifting the resulting clay would obviously provide particles with a diameter less than 0.5μm and particles less than 5μm.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch,* 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). In addition, a *prima facie* case of obviousness exists because the claimed ranges "overlap or lie inside ranges disclosed by the prior art", see *In re Wertheim,* 541 F.2d 257, 191 USPQ 90 (CCPA

1976; *In re Woodruff,* 919 F.2d 1575, 16USPQ2d 1934 (Fed. Cir. 1990). See MPEP 2131.03 and MPEP 2144.05I.

9. Claims 14,16,21,24,30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Plapper et al. (US 4,272,242) in view of Christner et al. (US 5,102,422).

Plapper teaches tanning leathers with a combination of aluminosilicates and bentonites (column 4, lines 10-30; column 18, lines 25-35). Plapper further teaches that tanning can be accomplished by combining aluminosilicate compositions with tanning agents with vegetable-synthetic tanning materials or chrome tanning materials (column 12, lines 5-15; column 24, example 6). Plapper further teaches that the desired particle size can be adjusted by grinding and air sifting (column 9, lines 15-20).

Plapper does not teach all the instantly claimed components in a single example and is silent as to a bimodal distribution and the particle size of the bentonite.

Christner teaches the conventional use of bentonites in leather treatment compositions (column 5, lines 20-25). Christner further teaches the particle sizes of commercially available flakes are 0.5-5 μm (column 5, lines 35-45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tanning methods taught by Plapper by incorporating the bentonites of the particles sizes claimed by Christner because Christner clearly teaches bentonites are commercially sold in these particle sizes. One of ordinary skill in the art would have been motivated to substitute the commercially available bentonites of

the particle sizes taught by Christner into the leather treatments taught by Plapper for the predictable result of effectively treating leather.

Regarding the limitation of bimodal distribution, it would be obvious to one of ordinary skill in the art to sift the bentonites such that a bimodal distribution is achieved because sifting the resulting clay would obviously provide particles with a diameter less than 0.5μm and particles less than 5μm.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch,* 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). In addition, a *prima facie* case of obviousness exists because the claimed ranges "overlap or lie inside ranges disclosed by the prior art", see *In re Wertheim,* 541 F.2d 257, 191 USPQ 90 (CCPA 1976; *In re Woodruff,* 919 F.2d 1575, 16USPQ2d 1934 (Fed. Cir. 1990). See MPEP 2131.03 and MPEP 2144.05I.

Response to Arguments

10. Applicant's arguments filed regarding Komforth in view of Kramer have been fully considered but they are not persuasive. The applicant argues that Cramer is not related to tanning of hides but rather to the treatment of leather, a product of the tanning process. The examiner argues that Cramer is simply relied upon to demonstrate that clays of the instantly claimed particle sizes are conventionally used in the treating of leather. Komfoth is relied upon for the teaching of using kaolins in treating hides during the tanning process. Nothing unobvious is seen in substituting the conventional particle size of a clay known to treat leather into the tanning process for which that particle is disclosed for the predictable result of effectively treating the leather or hide. Applicant's arguments regarding the use of hides vs. tanned leathers is insufficient to overcome the rejection because as disclosed in applicant's instant claim 26, the animal hide treated may be an already tanned hide. Therefore, this obviates the coating of leathers, which are tanned hides. The rejections are maintained.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amina Khan whose telephone number is (571) 272-5573. The examiner can normally be reached on Monday through Friday, 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AK
October 12, 2007

LORNA M. DOUYON
PRIMARY EXAMINER